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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,662	11/10/2003	Alfred D. Commins	SST/1367	6146

498 7590 06/17/2005

JAMES R. CYPHER
 405 14TH STREET
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 OAKLAND, CA 94612

EXAMINER

HORTON, YVONNE MICHELE

ART UNIT	PAPER NUMBER
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3635

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,662

Applicant(s)

COMMINS ET AL.

Examiner

Yvonne M. Horton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 23-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 23-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/9/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 23-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,706,626 to MUELLER in view of either US Patent #4,037,381 to CHARLES or US Patent #5,390,466 to JOHNSON et al. In reference to claims 1 and 23, MUELLER discloses the use of a diaphragm (100) including structural panels (110a,b); a plurality of framing members (102a,b) (104,106) and (140) disposed in registry with a proximal side of the structural panel (110a,b); and a plurality of perimeter fasteners (124). MUELLER discloses the basic claimed diaphragm except for explicitly detailing the use of a means for reducing bending of the fasteners. Both brackets and washers are old and very well known in the art for their ability to reduce fasteners from bending as a result of forces being applied thereto. However, both CHARLES and JOHNSON et al. teach that it is known in the art to provide a structural panel with a means, either in the form of brackets (56) in CHARLES or washers (32,35) in JOHNSON et al., for reducing bending of fasteners. Hence, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the structure of MUELLER with the means for reducing bending of fasteners of either CHARLES or JOHNSON et al. in order to ensure that the panel is structurally sound and capable of resisting forces imposed thereupon. Without additional bracket or

washers, when a force is imposed on the structure the fasteners will tend to break or fracture and not be able to maintain its structural integrity. However, brackets and washers provide fasteners with the strength needed to withstand forces imposed thereon. Regarding claim 24, the fasteners are closely spaced. In reference to claim 27, the means for reducing bending is a perimeter edging member (102a,b) (104) (106) (140) disposed near an edge face of the structural panel (110a,b). Regarding claim 28, the perimeter edging member (102a,b) (104) (106) (140) has a first face member (120). In reference to claim 29, the first face (120) is disposed on the distal side of the structural panel (110a,b). Regarding claim 30, the means for reducing bending (102a,b) (104) (106) (140) is made from light gauge sheet metal.

Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,706,626 to MUELLER. MUELLER discloses the basic claimed shear panel except for explicitly detail a fastener spacing of 2 inches and except for disclosing that his structural panels are wood. Regarding claim 25, MUELLER discloses a fastener spacing of 4 inches. Although MUELLER does not detail a spacing of 2 inches, it would have been obvious to one having ordinary skill in the art at the time the invention was made that the spacing is selected to depend upon the required rigidity of the connection and the material of the members forming the connection. For instance, an all metal panel used for installation in a building known for earthquake exposure might need the fasteners to be spaced closer; whereas if the very same panel were used in a building not known for earthquake exposure would do well with fasteners not so closely spaced. In reference to claim 26, again, it would have been obvious to one

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having ordinary skill in the art at the time the invention was made to select a known material suitable for the use intended as an obvious matter of design choice. A wood panel for use in a low stress imposed residential environment performs well whereas a metal panel performs well in building in environments having large stresses imposed thereon.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (571) 272-6845. The examiner can normally be reached on 6:30 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D. Friedman can be reached on (571) 272-6842. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Yvonne M. Horton
Examiner
Art Unit 3635
6/14/05